

IN THE CLAIMS

1 1. (Currently amended) A personal communications device comprising:  
2 a telecommunications unit comprising a code division multiple access (CDMA)  
3 device, wherein the telecommunications unit further comprises a clock source; and  
4 a global positioning system (GPS) receiver, wherein the GPS receiver comprises a  
5 voltage controlled oscillator for generating a GPS system clock signal based upon the  
6 clock source, and a feedback loop for controlling the voltage controlled oscillator,  
7 wherein the feedback loop comprises,  
8 a phase comparator for generating a control signal in accordance with the  
9 feedback signal and the clock source; and  
10 a loop filter for processing the control signal and outputting the control signal  
11 to the voltage controlled oscillator; and  
12 ~~a clock source for providing a clock signal to the global positioning receiver and~~  
13 ~~the telecommunications unit.~~

1 2. (Currently amended) The personal communications device of A personal  
2 ~~communications device according to claim 1~~ wherein the clock source provides a  
3 common clock signal to the global positioning receiver and the telecommunications unit.

1 3 Claims 3 and 4 (Canceled).

1 3 5. (Currently amended) The personal communications device of A personal  
2 ~~communications device according to claim 1~~ wherein the clock source comprises a  
3 crystal oscillator.

1 4 Claims 6 and 7 (Canceled).

1 4 8. (Currently amended) The personal communications device of A personal  
2 ~~communications device according to claim 1~~ wherein the frequency synthesizer  
3 comprises:  
4 a controlled oscillator having a variable output controlled by an input signal;

5 a frequency divider coupled to receive the output of the controlled oscillator and  
6 responsive to the output to provide a frequency divided output signal;  
7 a phase compensation circuit coupled to receive the frequency divided output  
8 signal from the frequency divider, the phase compensation circuit responsive to the  
9 frequency divided output signal to provide an output which compensates for phase lag of  
10 the frequency divided output of the frequency divider; and  
11 a phase detector coupled to receive an output of the phase compensation circuit  
12 and the GPS system clock signal frequency and to output a signal proportional to the  
13 difference in phase between the output of the phase compensation circuit and the GPS  
14 system clock signal ~~two inputs~~ to control the controlled oscillator.

1 <sup>5</sup> 9. (Currently amended) The personal communications device of claim 18  
2 wherein the divider is a fractional-N divider.

1 <sup>6</sup> 10. (Currently amended) The personal communications device of claim 18  
2 wherein the controlled oscillator is a voltage controlled oscillator.

1 <sup>7</sup> 11. (Currently amended) The personal communications device of claim 18  
2 further comprising a switch for selectable engaging the feedback loop to control the  
3 voltage controlled oscillator.

1 <sup>8</sup> 12. (Currently amended) The personal communications device of claim 14  
2 wherein the switch is permanently set during manufacture.

1 <sup>9</sup> 13. (Currently amended) A method of clocking GPS receiver operations  
2 comprising the steps of:  
3 receiving a clock signal from a clock source;  
4 generating a control voltage for controlling the frequency of an oscillator signal  
5 generated by a voltage controlled oscillator based upon a feedback signal generated  
6 by ~~from~~ a frequency synthesizer; and  
7 generating a system clock signal of a particular frequency in response to the  
8 control voltage, wherein the frequency synthesizer generating the feedback signal

9 includes  
10 receiving the system clock signal;  
11 frequency dividing the system clock signal by at least two integer values to  
12 generate a fractional-N divider signal over a discrete time period;  
13 generating a variably delayed signal based upon the fractional-N divided  
14 signal within the discrete time period; and  
15 comparing a phase of the variably delayed signal and a reference signal and  
16 varying the system clock signal according to a detected phase difference.

1 <sup>10</sup> 14. (Original) A method of clocking GPS receiver operations according to claim  
2 <sup>9</sup> 13, wherein the clock source comprises a crystal oscillator of a telecommunications unit.

1 <sup>11</sup> 15. (Original) A method of clocking GPS receiver operations according to claim  
2 <sup>9</sup> 13, wherein the telecommunications unit comprises a CDMA based telecommunications  
3 unit.

1 <sup>12</sup> Claim 16 (Canceled).

1 <sup>12</sup> 17. (Currently amended) A personal communications device comprising:  
2 means for receiving a telecommunications signal;  
3 means for receiving a global positioning system (GPS) signal comprising an  
4 oscillator for generating a GPS system clock signal and a feedback loop for generating  
5 and providing a control signal to the oscillator; and  
6 means for generating a clock source signal to be provided to the means for  
7 receiving a global positioning system (GPS) signal and the means for receiving a  
8 telecommunications signal, wherein the feedback loop comprises,  
9 a frequency synthesizer for generating a feedback signal; and  
10 a phase comparator for generating a control signal in accordance with the  
11 feedback signal and the clock source signal.

1 <sup>13</sup> 18. (Original) A personal communications device according to claim <sup>12</sup> 17 wherein  
2 the means for receiving a telecommunications signal comprises a code division multiple

3 access (CDMA) based radio frequency receiver.

1 [ Claims 19-20 (Canceled).

1 9 <sup>14</sup> 21. (Currently amended) A personal communications device according to claim  
2 ~~17-19~~ wherein the means for receiving a telecommunications signal includes the means for  
3 generating a clock source signal, and wherein the means for generating a clock source  
4 signal comprises a crystal oscillator ~~within the means for receiving a telecommunications~~  
5 ~~signal.~~

1 [ Claims 22-26 (Canceled).

---